Amendments to the Specification

Please insert the following new paragraph following paragraph [0006]:

--Fig. 3 is an enlarged, schematic fragmentary view of a tubular layer containing a plurality of nanotubes.--

Please replace paragraph [0010] with the following rewritten paragraph:

--A plurality of electrically conductive, carbon materials, preferably in the form of nanotubes 30 (Fig. 3), is dispersed in the polymer forming the layer 16. This is achieved by controlled dispersion of specifically designed, highly electrically conductive, carbon nanotubes into the supporting polymer matrix during fabrication of the layer 16. The nanotubes can either have a single wall or multiple walls and are fullerenes (a convex cage of atoms with only hexagonal and/or pentagonal faces) with a diameter of approximately 1.2-1.4 nm for a single wall nanotube and somewhat larger diameter for multi-wall nanotube. The nanotube structure may vary with respect to the chiral angle (or helicity) of the arrangement of hexagonal shapes. With the proper angle, the nanotubes have a relatively high electrical conductively, substantially equal to that of copper, when compared to the polymer forming the layer 16, but with a comparatively much lower density. The nanotubes have a length-to-diameter ratio ranging from 800 to 10,000. Since the percolation (onset of conductivity) threshold for these materials is less than one half of one percent by volume, this relatively high ratio results in a much lower required filler content to achieve percolation than traditional metal filled systems. In other words, the density of the nanotubes in the later 16 is less than the density of metal that would have to be dispersed in the layer to achieve the same electrical conductivity. As a result the pipe 10 is much lighter when compared to ~~metal-laden~~ pipes with metal filled polymer layers.--